

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P709013

Luminaire Tested: **24APR-49-116L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709013
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-49-116L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

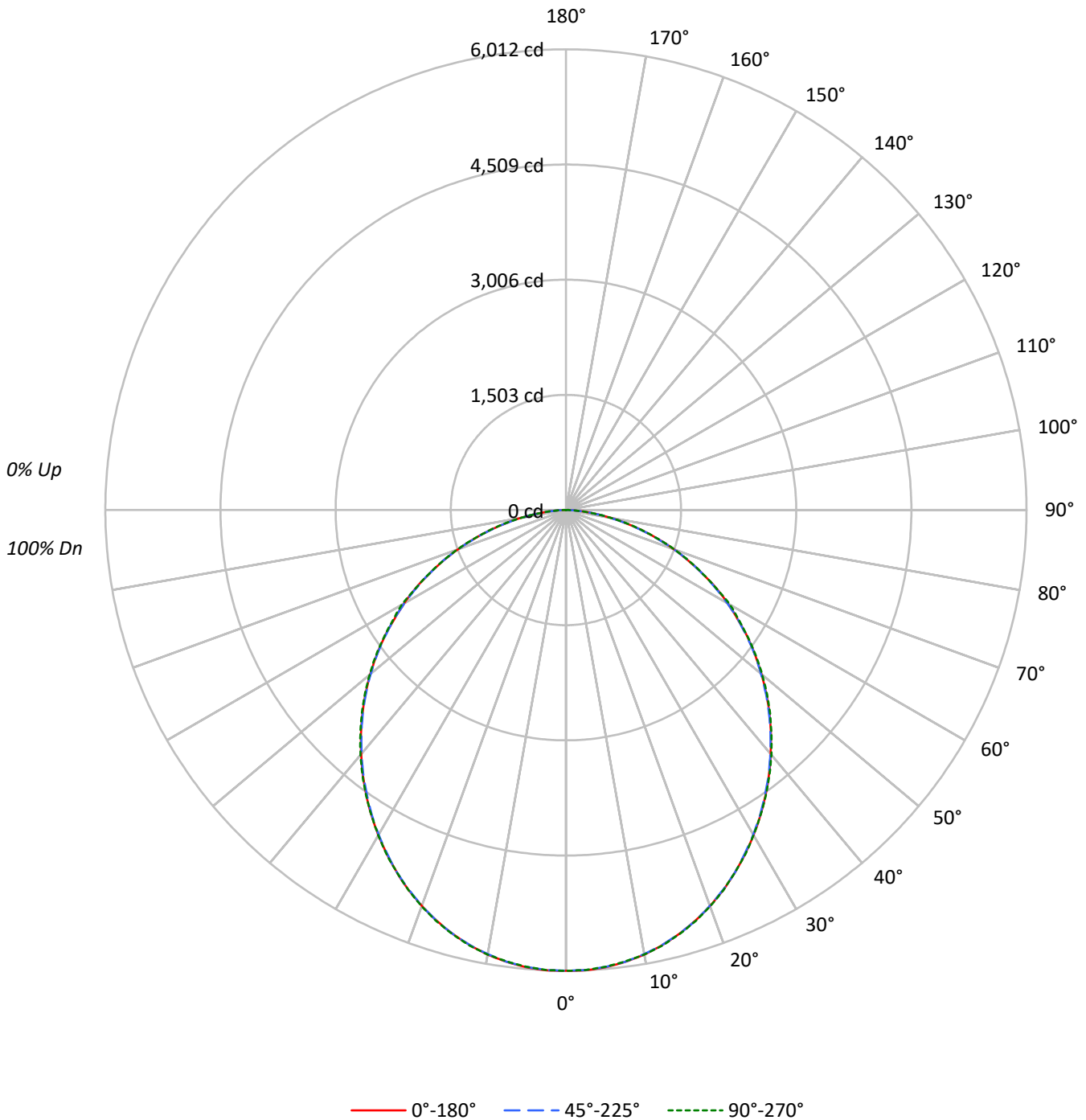
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16225.6 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 128.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8090	8090	8090
5°	8090	8082	8078
10°	8048	8041	8047
15°	7972	7972	7981
20°	7874	7869	7881
25°	7751	7747	7747
30°	7611	7599	7612
35°	7462	7442	7471
40°	7304	7289	7328
45°	7148	7133	7172
50°	6977	6959	7003
55°	6787	6769	6810
60°	6562	6547	6662
65°	6264	6266	6282
70°	5920	5888	5927
75°	5400	5359	5395
80°	4662	4604	4635
85°	3637	3602	3592



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.2	3.5
10°-20°	1613.8	9.9
20°-30°	2403.4	14.8
30°-40°	2839.5	17.5
40°-50°	2896.7	17.9
50°-60°	2584.7	15.9
60°-70°	1948.6	12.0
70°-80°	1092.5	6.7
80°-90°	278.0	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4585.5	28.3
0°-40°	7425.0	45.8
0°-60°	12906.4	79.5
0°-90°	16225.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16225.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6012	6012	6012	6012	6012	
5°	5990	5987	5984	5985	5981	568
15°	5723	5720	5723	5727	5730	1614
25°	5221	5214	5218	5223	5218	2404
35°	4543	4536	4531	4544	4549	2842
45°	3756	3754	3749	3760	3769	2897
55°	2893	2887	2886	2894	2903	2584
65°	1967	1958	1968	1974	1973	1952
75°	1039	1021	1031	1025	1038	1100
85°	236	227	233	233	233	282
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6012.5	6012.5	6012.5	6012.5	6012.5
2.5°	6012.5	6009.6	6007.3	6006.7	6007.9
5°	5990.0	5987.1	5984.2	5985.4	5980.7
7.5°	5946.7	5947.2	5944.9	5945.5	5940.3
10°	5890.6	5887.8	5885.5	5890.6	5890.1
12.5°	5815.0	5809.8	5812.1	5820.2	5820.8
15°	5723.2	5719.7	5723.2	5727.2	5729.5
17.5°	5618.7	5615.8	5619.8	5620.4	5625.0
20°	5499.1	5495.7	5495.7	5501.4	5503.8
22.5°	5366.9	5361.7	5362.9	5366.9	5369.8
25°	5220.8	5214.4	5218.5	5223.1	5218.5
27.5°	5063.2	5059.7	5055.6	5061.4	5068.9
30°	4898.6	4891.6	4891.1	4895.1	4899.2
32.5°	4724.8	4716.7	4716.7	4721.9	4725.3
35°	4542.9	4536.5	4530.7	4544.0	4548.6
37.5°	4355.2	4347.7	4347.1	4355.2	4362.7
40°	4158.3	4151.9	4150.2	4164.0	4172.1
42.5°	3959.6	3955.6	3951.5	3965.4	3971.8
45°	3756.4	3754.1	3748.9	3759.8	3769.1
47.5°	3547.3	3539.8	3538.1	3550.8	3560.0
50°	3333.1	3330.2	3324.4	3336.0	3345.8
52.5°	3116.0	3112.5	3108.5	3118.8	3129.2
55°	2893.1	2886.7	2885.6	2894.2	2902.9
57.5°	2660.9	2655.7	2663.8	2671.9	2678.8
60°	2438.6	2426.5	2432.8	2442.1	2475.6
62.5°	2215.1	2193.8	2198.4	2223.8	2209.4
65°	1967.4	1957.6	1968.0	1973.8	1973.2
67.5°	1735.3	1723.7	1739.3	1734.7	1741.6
70°	1504.9	1484.6	1496.8	1498.5	1506.6
72.5°	1266.9	1249.6	1260.0	1265.2	1270.4
75°	1038.8	1020.9	1030.8	1025.0	1037.7
77.5°	811.9	800.9	807.3	811.3	821.1
80°	601.7	589.6	594.2	594.8	598.2
82.5°	407.7	398.4	399.6	410.0	406.0
85°	235.6	226.9	233.3	232.7	232.7
87.5°	91.8	84.9	91.2	90.7	89.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)